

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
Sanibel, Florida

FEB 4 1952

February 1, 1952

To: R.C. Bushland, In Charge

From: A.H. Baumhover

Subject: Weekly Progress Report, 1/28-2/1/52

Egg masses collected during the week are as follows:

Date	1/26	27	28	29	30	31	2/1
Temp. range	80	78	71	61	?	65	71
F. degrees	65	66	68	54	44	46	52
Egg masses--							
Knip	SR	12	3	1	3	3	2
Pen	FR	7	4	1	2	0	3
	SNR	0	1	2	1	0	0
	FNR	0	0	0	0	0	1
	(SR)*	0	0	0	0	1	2
Bush	SR	9	3	2	2	0	6
Pen	FR	10	7	0	0	1	4
	SNR	0	0	0	0	0	0
	FNR	0	0	0	0	0	0
	(SR)	0	1	0	0	0	0
Eddy	SR	20	5	2	1	0	1
Pen	FR	8	2	3	0	0	0
	SNR	0	0	0	1	0	0
	FNR	0	2	3	3	0	8
	(SR)	0	0	0	0	0	0

*Partially sterile

The January 28th shipment of pupae was received January 30th and the insulated container returned immediately.

Weekly progress report 1/26-2/1/52, Baumhover, p.2.

Fly catches not previously listed are as follows:

Trap	School	Junction	Captiva	St.James	Pt.Rassa	Estero
Date	1/28	1/28	1/28	1/26	1/30	1/30
Catch (qts.)	2.1	1.5	1.0	0.05	0.7	0.9
R-C.am.	7	5	2	0	0	0
NR-C.am.	8	35	37	0	0	0

Your several and thorough memoranda have been noted.

cc: E.F. Knipling
G.W. Eddy
R.C. Bushland (Oak Ridge, Tenn.)

Arvid H Baumhover

Sanibel, Florida

2/7/52

To: R.C Bushland, In Charge

From: A.H. Baumhover

Subject: Insect Collection from the 25 Florida
Screw worm Traps

Following is a copy of the notations made by Dr.
Knippling 1/19-20/52 upon examination of the coll-
ections listed:

Trap no.	Collection date	Total catch (qts.)	Number americana	Remarks
10	11/28	200 flies	0	Most of flies were sarcoph
10	12/12	1.0	0	
1	1/16	1/8	0	
2	1/17	2.1	3	
3	1/17	2.0	12	1 male, 11 female
4	1/17	2.0	1	
5	1/14	2.0	1	
6	1/14	2.5	0	
23	1/15	4.0	0	
25	1/17	3.1	6	
20	1/15	1.5	0	
24	1/16	1.75	0	
21	1/15	0.75	0	
22	1/15	4.25	1	

500 sample trap #25, 1/17/52

473 C. macellaria
21 Sarcophaga
5 Lucilia
1 misc.

Dr. Knippling suggested the advisability of keeping
a record at this laboratory of the fly catches made
thruout the state. I would appreciate a copy of the
collection information as it is available.

cc: G.W. Eddy

Sandwich, Florida

2/7/52

To: R.C. Bushland, In Charge

From: A.M. Baumhoefer

Subject: Insect Collection from the 25 Florida
Screw worm traps

Following is a copy of the notations made by Mr.
Knipping 1/18-20/52 upon examination of the col-
lections listed:

Trap no.	Collection date	Total catch (pts.)	Number American	Remarks
10	1/18/52	200 flies	0	Most of flies were seropod
10	12/12	1.0	0	
1	1/10	1.8	0	
2	1/17	2.1	3	
3	1/17	2.0	12	1 male, 11 female
4	1/17	2.0	1	
5	1/14	2.0	1	
6	1/14	2.2	0	
23	1/15	4.0	0	
25	1/17	2.1	6	
20	1/15	1.5	0	
24	1/10	1.75	0	
21	1/15	0.75	0	
22	1/15	4.25	1	

200 sample trap #25, 1/17/52

473 C. macellaria
21 Seropodops
2 Lucilia
1 misc.

Mr. Knipping suggested the advisability of keeping
a record at this laboratory of the fly catches made
throughout the state. I would appreciate a copy of the
collection information as it is available.

cc: G.W. Eddy

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UNITED STATES DEPARTMENT OF AGRICULTURE
 AGRICULTURAL RESEARCH ADMINISTRATION
 BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
 Sanibel, Florida

February 8, 1952

To: R.C. Bushland, In Charge

From: A.H. Baumhover

Subject: Weekly Progress Report

Egg masses collected during the week are as follows:

Date		2/1	2/2	2/3	2/4	2/5	2/6	2/7		
Temp. range		71	66	72	70	64	62	64		
F. degrees		52	58	61	64	60	52	54	Totals 4th	
									release--	Flies re-
Egg masses--									1/22-2/5	leased 1/16
	SR	6	0	1	0	0	1	0	50	
	FR	00	0	2	0	2	1	0	26	6000 sterile
Knip	SNR	1	0	0	1	0	0	0	8	940 normal
Pen	FNR	0	0	3	2	0	0	0	6	(2200 R)
	(SR)*	0	0	0	0	0	1	0	4	
	SR	1	0	0	0	1	1	0	45	
Bush	FR	5	0	2	1	1	2	0	40	
Pen	SNR	1	0	0	0	0	0	0	1	
	FNR	4	0	2	1	0	0	0	13	
	(SR)	0	0	0	0	0	0	0	2	
	SR	3	0	1	0	0	0	0	51	
Eddy	FR	3	0	0	1	1	0	0	27	
Pen	SNR	0	0	0	0	0	0	0	3	
	FNR	1	0	0	4	1	3	0	27	
	(SR)	0	0	0	0	0	0	0	(SNR)2	

*Partially sterile

Emergence of flies from the 5th release (1/31) averaged 71% for the X-rayed and 63% for the normal from pupae placed in the field. X-rayed pupae and normal pupae held in the lab averaged 85% and 88%, respectively, based on 100 X-rayed and 20 normal pupae from each pen. In checking the entire releases we have been able to obtain accurate sampling by scooping up approximately 50 pupae at a time, randomly, until 500 pupae are obtained from each release cage.

Weekly progress report, 1/8/52, Baumhover, p.2.

Pupae retained in the laboratory were kept in ice cream cartons at the prevailing room temperatures. Perhaps the releases in the field could be made from the same cartons insulated interiorly with cotton batting to prevent rapid changes of temperature and properly shaded to prevent the building up of high internal temperatures. A small opening in the lid would allow the escape of the emerging flies. Please advise us of your suggestions. Receiving the X-rayed and normal pupae in 12 separate containers each will facilitate the establishment of release stations at approximately 1 mile intervals thruout the island.

Thirty additional goats for pens at Punta Rassa and trap No. 13 and 5 for replacement at Sanibel have been received. Three infested goats have been available in the above pens for egg deposition from 1/6/52. However, to date only 3 egg masses have been obtained, all at the pen near Trap #3. Larvae emerged from 99.7% of the approximately 600 eggs laid. Cool, rainy weather has been abundant during the week.

Fly catches obtained during the week are as follows:

Trap	School	Junction	Captiva	St. James	Pt. Rassa	Estero
Date	2/8	2/8	2/8		2/8	2/7
Catch (qts)	0.2	0.3	0.6		0.1	0.4
R.-C.am.	0	0	2		0	0
NR.-C.am.	0	2	2		0	0

Arrangements are being made to obtain delivery of the Ford cruiser mentioned in Mr. Curl's telegram to Mr. Eddy.

Enclosed is a copy of screw worm infestations recorded by C.C. Skipper while servicing traps. If you approve I will contact Messrs. Smith and Jones to obtain a current and complete list of infestations occurring near trap sites thruout the state.

cc: E.F. Knipling
G.W. Eddy
R.C. Bushland, Oak Ridge

afud H Baumhover

FEB 18 1952
FEB 18 1952

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

Sanibel, Florida

February 16, 1952

To: R.C. Bushland, In Charge

From: A.H. Baumhover

Subject: Weekly Progress Report

Egg masses collected during the week are as follows:

Date	2/8	2/9	2/10	2/11	2/12	2/13	2/14
Temp range	60	(record incomplete,			68	80	70
F. Degrees	44	but temp. average.)			56	56	58
Egg masses--							
Knip Pen	SR	0	1	1	0	1	5
	FR	0	2	0	0	0	0
	SNR	0	0	0	0	0	3
	FNR	5	1	0	1	0	0
	(SR)*	0	0	(SNR 1)*	0	0	0
Bush Pen	SR	0	0	0	2	2	3
	FR	0	1	0	0	0	2
	SNR	0	0	0	0	1	1
	FNR	1	0	0	0	0	0
	(SR)	0	0	0	0	0	0
Eddy Pen	SR	0	0	0	0	1	0
	FR	0	0	0	0	0	0
	SNR	0	0	0	0	0	0
	FNR	2	2	3	0	0	2
	(SR)	0	(SNR1)*	(SNR1)*	0	0	0
Punta Rassa	(none collected)						
Miles	FNR	2		7	6	6	
City							4
To Orlando		1					

To increase accuracy of egg mass count we are checking both Sanibel and mainland goat pens as late in the afternoon as possible, by working individually.

*Partially sterile.

Weekly progress report, A.H. Baumhover, 2/16/52 p.2.

All the egg masses collected at the Miles City pen were checked for fertility except the 5 sent to Orlando to establish a colony of the Florida strain. Fertility was 99 plus percent.

Fly catches obtained during the week are as follows:

Trap	School	Junction	Captiva	St.James	Pt.Rassa	Estero	Florida Trap#3*
Date	2/14	2/14	2/15		2/15	2/15	2/8
Catch (qts)	0.2	0.4	0.5		0.1	0.2	3.8
R.-C.am.	2	15	1		1	0	---
NR.-C.am.	0	5	29		0	0	26

*To facilitate correlation of egg masses collected near status traps with fly catches we are running the collections involved.

We are in receipt of a boat motor launch 15'8" x 6' with a Phantom (Gray) Four 74 motor. The motor had been in operation 161 hours and performs nicely.

cc: E.F. Knipling
G.W. Eddy
R.C. Bushland, Oak Ridge, Tenn.

A.H. Baumhover

UNITED STATES DEPARTMENT OF AGRICULTURE
 AGRICULTURAL RESEARCH ADMINISTRATION
 BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

cc: E. F. Knippling
 G. W. Bddy
 R. C. Bushland, Oak Ridge, Tenn.

copy 4 Bushland

Two facilitate correlation of egg masses collected near status traps with fly catches we are running the collections involved.

We are in receipt of a post motor launch 15' 6" x 6" with a Phantom (Gray) Four 74 motor. The motor had been in operation 161 hours and performs nicely.

Trap	Date	Catch (pts)	R.-C. am.	R.-C. am.
School	2/14	0.8	2	0
Junction	2/14	0.4	15	5
Captiva	2/15	0.8	1	25
St. James	2/15	0.1	1	0
Pt. Masses	2/15	0.2	0	0
Estero	2/15	0.2	0	0
Tram 3*	2/15	3.8	---	25
Florida				

Fly catches obtained during the week are as follows:

All the egg masses collected at the Miles City pen were checked for fertility except the 5 sent to Orlando to establish a colony of the Florida strain. Fertility was 99 plus percent.

Weekly progress report, A. H. Bushman, 2/16/52 p. 2.

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UNITED STATES DEPARTMENT OF AGRICULTURE
 AGRICULTURAL RESEARCH ADMINISTRATION
 BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

Sanibel, Florida

2/22/52

To: R.C. Bushland, In Charge

From: A.H. Baumhover

Subject: Weekly Progress Report

Egg masses collected during the week are as follows:

Date	2/15	16	17	18	19	20	21	22
Temp. Range	72	72	64	62	71	72	68	72
F.Degrees	61	64	63	50	52	59	64	60
Egg masses--								
Knip pen	SR 12	3	2	0	4	1	2	
	FR 8	5	0	1	2	2	0	
	SNR 0	2	5	3	1	0	3	
	FNR 1	5	1	6	1	1	4	
	(SR)* 0	0	1	(SNR1)* 0	0	0	(SNR1)*	
Bush pen	SR 6	4	2	1	2	4	6	
	FR 2	2	0	0	0	1	2	
	SNR 0	0	0	2	1	1	2	
	FNR 0	0	0	0	0	3	0	
	(SR) 0	0	0	0	0	(SNR1)	0	
Eddy pen	SR 3	2	1	0	0	2	0	
	FR 1	0	0	0	0	0	0	
	SNR 0	1	0	1	0	0	1	
	FNR 0	2	0	1	1	0	0	
	(SR) 1	0	0	0	0	0	0	
Punta Rassa	0	0	0	0	0	0	1	0
Miles City	FNR 7	2	5	3		(to Or- 0	(5)	
						lando)		

*Larvae developed but died in shell.

Egg masses collected February 15, 16, 17, and 18 at Miles City were 99 plus per cent fertile. However, the single mass collected on the 21 at Punta Rassa was approximately 50% sterile. Data for the 19th and 20th at Miles City are not listed since Mr. Eddy made the check on the 20th on his trip back to Orlando.

Weekly progress report, Baumhover, 2/22/52, p.2.

Although 16 days of the probable egg-laying period of the 5th release have elapsed we are continuing to obtain radioactive egg masses. Several days of cool, rainy weather at the beginning of the release period may have slowed development of the flies. However, a summary of the data is given below:

5th Release

No. Pupae		
sterile	12700 x 71%--9517	(300 sterile and 60 normal
normal	2540 x 63%--1600	held in lab not included)
Emergence period	Jan. 31 thru Feb. 2	
Egg period	Jan. 7 thru Jan. 22	
Radioactive masses-		
infertile	103	
fertile	38	
Normal masses-		
infertile	32	
fertile	46	
Larvae developed but died in shell-		
radioactive	2	
non-radioactive	6	

We are continuing to experience some difficulty in monitoring small egg masses at the probable end of the egg-laying period. A higher degree of radioactivity would lessen the chance of failing to recognize egg masses laid by released flies.

Under the supervision of Mr. Eddy 15 release stations were established on Captiva and Sanibel Islands as shown on the enclosed map. The pupae received in 24 cartons were divided to provide 868 X-rayed and 86 normal pupae at each station. A night letter will be sent to Kerrville requesting subsequent shipments to be placed in 30 cartons, 15 X-rayed and 15 normal. The $\frac{1}{2}$ pint cartons were suspended by piercing a length of baling wire thru the center and the flies are emerging thru a slit in the top of the lid. A spot check indicates that the emergence is proceeding satisfactorily.

Aeration holes in this week's shipment were large enough to allow several flies to escape.

cc: E.F. Knipling, G.W. Eddy
R.C. Bushland, Oak Ridge, Tenn.

Alfred H. Baumhover

Weekly progress report, Baumhauer, 2/22/52, p. 2.

Although 16 days of the probable egg-laying period of the 5th release have elapsed we are continuing to obtain radioactive egg masses. Several days of cool, rainy weather at the beginning of the release period may have slowed development of the flies. However, a summary of the data is given below:

5th Release

No. Pupae	sterile	normal
12700 x 712--9517	(300 sterile and 60 normal)	
2540 x 632--1800	held in lab not included	
Emergence period		
Jan. 31 thru Feb. 2		
Egg period		
Jan. 7 thru Jan. 22		
Radioactive masses-sterile	103	
sterile	38	
Normal masses-sterile	32	
sterile	46	
Larvae developed but died in shell-		
radioactive	2	
non-radioactive	6	

We are continuing to experience some difficulty in monitoring small egg masses at the probable end of the egg-laying period. A higher degree of radioactivity would lessen the chance of failing to recognize egg masses laid by released flies.

Under the supervision of Mr. Eddy 15 release stations were established on Captiva and Sanibel Islands as shown on the enclosed map. The pupae received in 24 cartons were divided to provide 868 X-rayed and 86 normal pupae at each station. A night letter will be sent to Kewville requesting subsequent shipments to be placed in 30 cartons, 15 X-rayed and 15 normal. The 30 cartons were suspended by piercing a length of baling wire thru the center and the flies are emerging thru a slit in the top of the lid. A spot check indicates that the emergence is proceeding satisfactorily.

Aeration holes in this week's shipment were large enough to allow several flies to escape.

cc: E.F. Knippling, G.W. Eddy
R.C. Bushland, Oak Ridge, Tenn.

Robert H. Baumhauer

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FEB 25 1952

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH ADMINISTRATION
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
Sanibel, Florida

February 22, 1952

To: R.C. Bushland, In Charge

From: A.H. Baumhover

Subject: Your Letter 2/18/ 52

In answer to your letter 2/18/52 information on the 3rd and 4th releases is given below. The data on the 5th release may be complete at the writing of the regular weekly report, and if so a summary for that release will be included.

	3rd Release	4th Release
No. Pupae		
sterile	19500 x 22%--4290	10000 x 60%--6000
normal	3900 x 23%--897	2000 x 47%-- 940
Emergence period	1/2 thru 1/4	1/16 thru 1/18
Egg period	1/8 thru 1/21	1/22 thru 2/6
Radioactive masses-		
infertile	42	138
fertile	44	100
Normal masses-		
infertile	4	13
fertile	16	55
Larvae developed but died in shell-		
radioactive	-4	7
non-radioactive	--	2

{ On February 19, 16 Kodaslide directly related to the Sanibel project and 25 of general interest were sent to Kerrville. Slides from a roll of Ansco color film should reach Kerrville directly from the processor before the 28th of February. In addition I'm enclosing several slides gleaned from recently processed film.

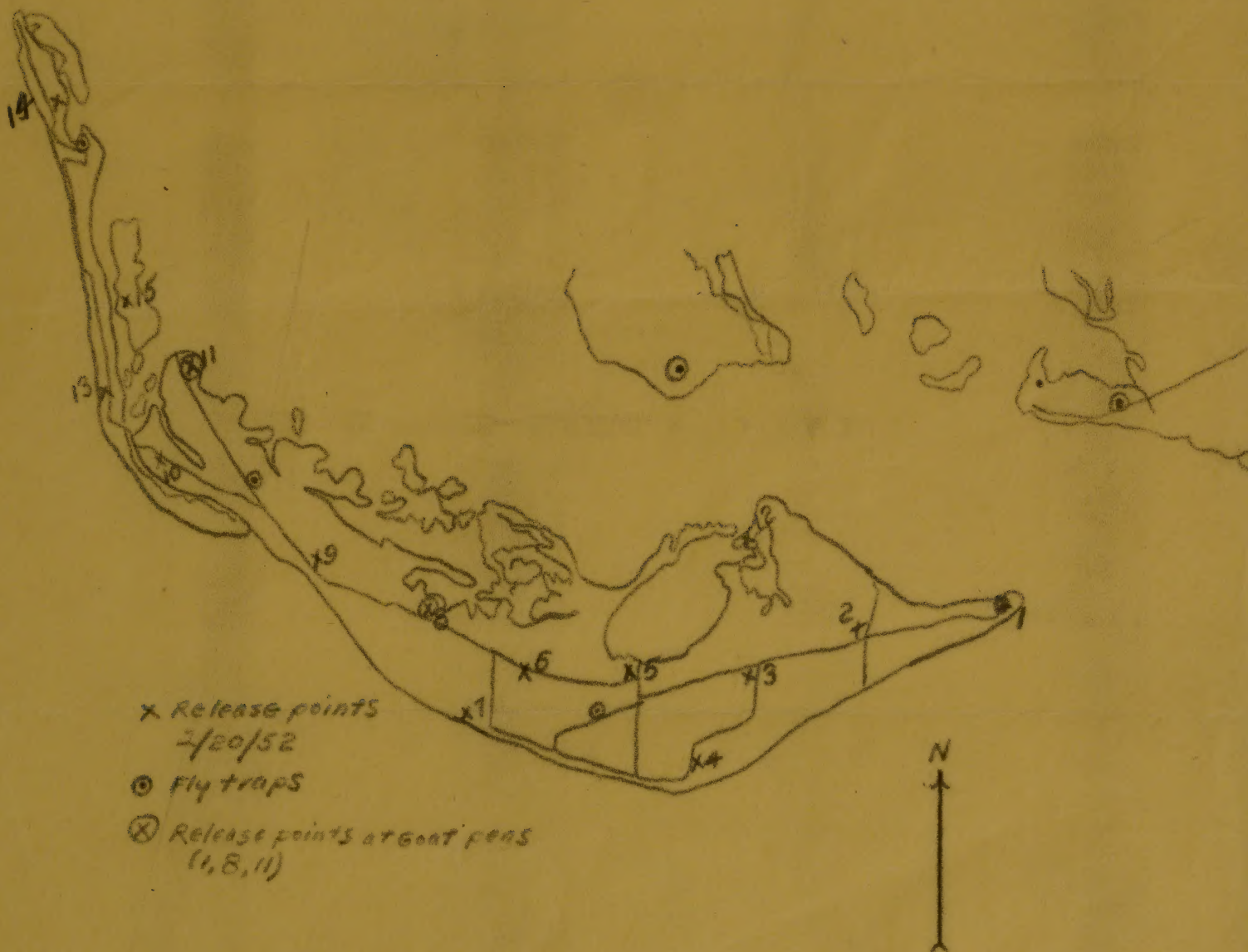
Data for the 4th release varies from data reported in the February 8th report due to difference in days actually included in totals.

enc. (to Oak Ridge)
cc: R.C. Bushland
Oak Ridge, Tenn.

A. H. Baumhover

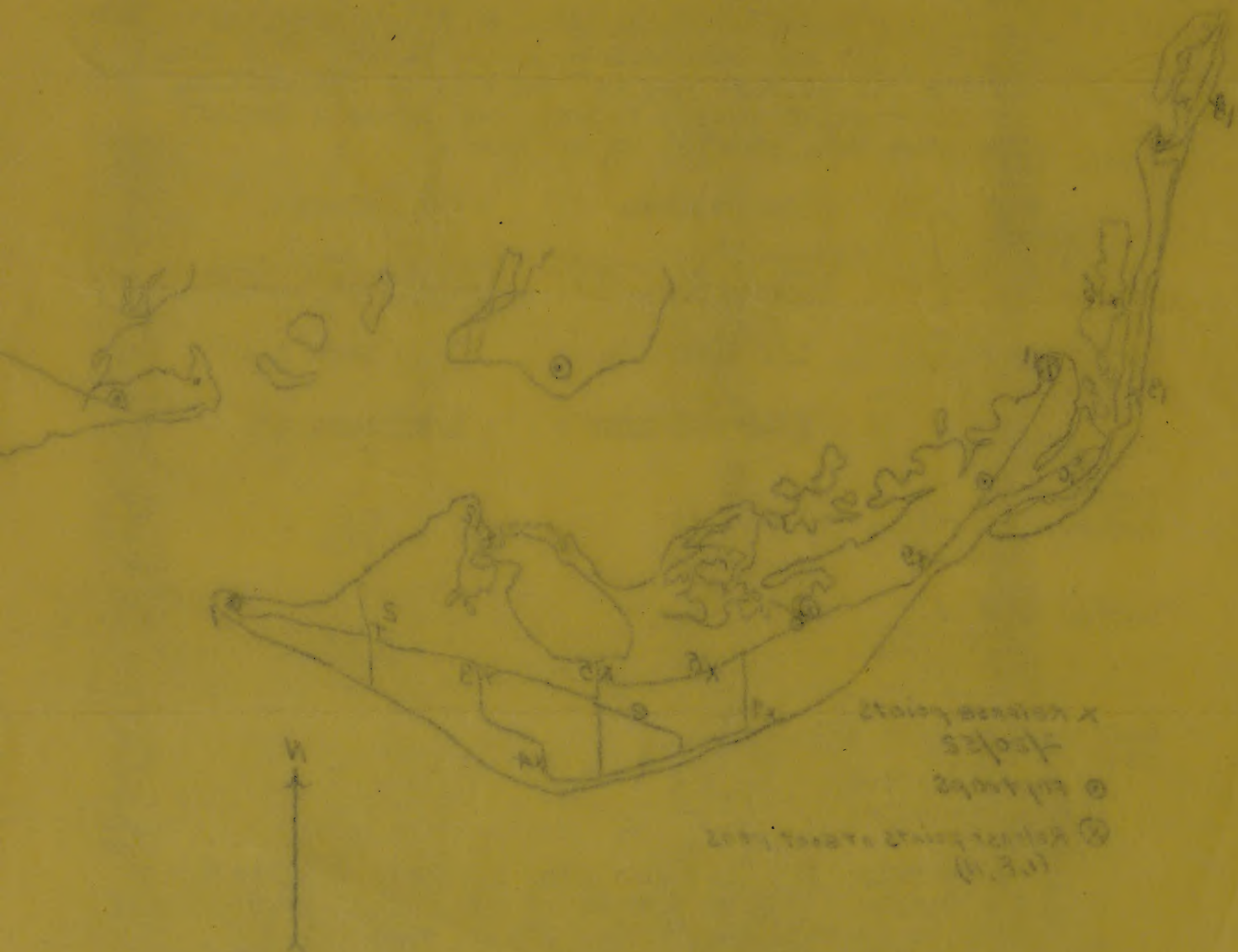
RELEASE POINTS--SANIBEL & CAPTIVA ISLANDS

868 X-rayed and 86 normal pupae placed
at each of 15 stations.



RELEASE POINTS--SANTIAL & CAPTIVA ISLANDS

888 X-rayed and 88 normal pupae placed at each of 15 stations.



Sanibel, Florida

2/22/52

To: R.C. Bushland, In Charge

From: A.H. Baumhover

Subject: Weekly Progress Report

Egg masses collected during the week are as follows:

Date		2/15	16	17	18	19	20	21	22
Temp. Range		72	72	64	62	71	72	68	72
F.Degrees		61	64	63	50	52	59	64	60
Egg masses--									
	SR	12	3	2	0	4	1	2	
Knip	FR	3	5	0	1	2	2	0	
pen	SNR	0	2	5	3	1	0	3	
	FNR	1	5	1	6	1	1	4	
	(SR)*	0	0	1	(SNR1)*	0	0	(SNR1)*	
	SR	6	4	2	1	2	4	6	
Bush	FR	2	2	0	0	0	1	2	
pen	SNR	0	0	0	2	1	1	2	
	FNR	0	0	0	0	0	3	0	
	(SR)	0	0	0	0	0	(SNR1)	0	
	SR	3	2	1	0	0	2	0	
Eddy	FR	1	0	0	0	0	0	0	
pen	SNR	0	1	0	1	0	0	1	
	FNR	0	2	0	1	1	0	0	
	(SR)	1	0	0	0	0	0	0	
Punta									
Rassa		0	0	0	0	0	0	1	0
Miles									
City	FNR	7	2	5	3	(to Or-	0	5	
						lando)			

*Larvae developed but died in shell.

Egg masses collected February 15, 16, 17, and 18 at Miles City were 99 plus per cent fertile. However, the single mass collected on the 21 at Punta Rassa was approximately 50% sterile. Data for the 19th and 20th at Miles City are not listed since Mr. Eddy made the check on the 20th on his trip back to Orlando.

Fly catches made during the week are as follows:

Trap	School	Junction	Captiva	St.James	Pt.Rassa	Estero	Florida Trap #3
Date	2/21	2/21	2/21	2/19	2/21	2/21	2/18
Catch (qts)	0.2	0.5	1.5	0.2	0.3	0.2	1.25
No. days catch made	7	7	6	24	6	6	10
R-C.am.	0	3	1	0	0	0	0
NR.-C.am.	0	1	43	0	0	0	10

UNITED STATES DEPARTMENT OF AGRICULTURE

MAR 4 1952

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

Sanibel, Florida

February 29, 1952

To: R.C. Bushland, In Charge

From: A.H. Baumhover

Subject: Weekly Progress Report

Egg masses collected during the week are as follows:

Date		2/22	23	24	25	26	27	28
Temp. range		74	73	69	66	70	64	64
in F. degrees		58	63	67	61	62	52	52
Egg masses--								
	SR	1	0	0	0	0	0	0
Knip	FR	0	0	0	0	0	0	0
Pen	SNR	1	1	0	0	1	0	0
	FNR	2	1	2	0	2	0	4
	SR	6	0	0	1	1	0	0
Bush	FR	0	0	3	0	0	0	0
Pen	SNR	1	0	0	0	0	0	0
	FNR	0	1	2	0	1	0	0
	SR	0	0	0	0	2	0	0
Eddy	FR	0	0	0	1	0	0	0
Pen	SNR	0	0	0	0	0	0	0
	FNR	1	1	0	2	2	0	2
Punta								
Rassa	FNR	0	0	0	0	0	0	0
Miles								
City	FNR	8	3	1	3*	2	0	3

*Two masses 90% fertile, remainder of Miles City masses 99% plus fertile.

Emergence of the pupae placed at 15 stations for release 2/20/52 averaged 83% for the normal and 79% for the X-rayed.

Three inches of rain 2/24-26 accompanied by cool, brisk winds limited fly activity.

Fly collections made during the week are as follows:

Trap	School	Junction	Captiva	St.James	Pt.Rassa	Estero	Florida Trap #3
Date	2/28	2/28	2/29		2/28	2/28	2/28
Catch (qts.)	0.2	0.2	1.25		0.1	0.2	0.3
No. days catch made	7	7	8		7	7	10
R-C.am.	0	2	5		0	0	0
NR-C.am.	0	5	50		1	0	4

Aeration holes in the shipment 2/25/52 were also large enough to allow flies to escape. Fortunately none had emerged before receipt of shipment.

The goats formerly held near Miles City have been moved to a point near Immokalee and an additional fly trap has been established. According to Mr. Skipper the management in charge of the land on which Trap #4 is located are meeting on March 2 and will have reached a decision by that time in regard to granting permission to place a pen of goats near the trap. If permission is not granted it will be necessary to establish an additional trap if the planned proximity of trap to goat pen is adhered to, since the corporation involved controls land within a 2 mile radius of the existing trap.

cc: E.F. Knipling
G.W. Eddy

afed H Baumhover

Fly collections made during the week are as follows:

Trap	School	Junction	Captiva	St. James	Pt. Rassa	Hateno	Florida
Trap	2/28	2/28	2/29	2/28	2/28	2/28	Trap #3
Date	0.2	0.2	1.25	0.1	0.2	0.3	2/28
Catch (pts.)	7	7	8	7	7	10	0.3
No. days	0	2	5	0	0	0	10
Catch made	0	2	5	1	0	0	4
H-C.am.	0	2	5	1	0	0	4
NR-C.am.	0	2	5	1	0	0	4

Aeration holes in the shipment 2/25/52 were also large enough to allow flies to escape. Fortunately none had emerged before receipt of shipment.

The goats formerly held near Miles City have been moved to a point near Immokalee and an additional fly trap has been established. According to Mr. Skipper the management in charge of the land on which Trap #4 is located are meeting on March 2 and will have reached a decision by that time in regard to granting permission to place a pen of goats near the trap. If permission is not granted it will be necessary to establish an additional trap if the planned proximity of trap to goat pen is adhered to since the operation involved controls land within a 2 mile radius of the existing trap.

John W. Bannover

cc: E.F. Knippling
G.W. Eddy